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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/748,060	TRENT, DOUGLAS MORGAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	THUY VI NGUYEN	3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 July 2008.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-14, 19-24,30 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 30 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/30/03</u> .  | 6) <input type="checkbox"/> Other: _____ .                        |

## DETAILED ACTION

### ***Examiner's Comments***

1. This action is in response to applicant's election received on July/29/2008 wherein:

Claims 1-7, 8-13, 14, 19-24, and 30 (Group I) have been elected without traverse.

### ***Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claim 1-7** are rejected under 35 U.S.C. 101 because the claims deal with a data processing apparatus containing software (module) and do not meet any of the statutory items such as process (method), machine (apparatus), manufacture (product) or composition. The system claims appear to be an apparatus claim in a preamble "*a data processing apparatus*", however, there are no normal structures or functional elements which are required in an apparatus claim. For instant, the independent 1 recited "*an input module, a storage module, a computation module, and an output module*" are described in the specification (par. 0030) as "*may be software*". Therefore, the claims have no structure elements and are directed to nonstatutory subject matter.

Claim 14 is rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter. With respect to claim 14, the claim language does not transform the underlying subject matter and the process is not tied to another statutory class. The process steps of "*identifying, determining, recording, calculating*" is not tied to another statutory class, such as an apparatus, and thus, the claims are directed to nonstatutory subject matter.

### *Claim Objections*

3. Claims 4-5 and 7 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

1) Claim 4 deals with calculating the convexity of the negotiation, there is no discussion of the "convexity" or how to use this limitation in independent method

claim 1, so it's not clear how this feature further limits the computation module of claim 1.

2) In claim 5, it's not clear how "to create at least one option set" further limits "an option set" in the last element of claim 1 above?

3) Claim 7 depends on claim 1, which is an apparatus claim. It's not clear how an inactive method step "is calculated to" further limits an apparatus claim?

#### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-7, 8-13, 14, 19-24 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For example, in independent method claim 14, it is unclear what are the function of the software involve in the modules are using to calculate the result of the three steps (d), (e) and (f) are using; e.g., step (d) "*calculating a plurality of option preferences of each option for each party*", step

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(e): "*calculating a plurality of sum of weighted option preferences for the issue wherein the sum of weighted option preferences is the sum of the issue weight of each option for each party multiplied by the option preference of each option for each party*", and step (f) "*calculating a negotiation solution from the sum of weighted option preferences, the negotiation solution comprising an option set*". Applicant is requested to supply the name and the function of the modules above so that a person of ordinary skill in the art can make or use the invention. Similarly, other set of claims contain the same calculating modules which are similar to claim 14 above, are rejected for the same reason set forth above.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 1-7, 14** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claims 1-7**, it appears to be an apparatus claim in preamble "a data process apparatus for calculating a negotiation solution", however, there are no structures or functional elements which are required in an apparatus claim. It is unclear of how the modules e.g. "*an input module, a storage module, a computation module, and an*

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*output module*" are described in the specification (par. 0030) as "may be software" and therefore, have no structure elements.

**Claims 2 and 8** recites the limitation "*the maximum*" in line 2. There is insufficient antecedent basic for this limitation in the claim.

**Claim 3** recites the limitation "*wherein the computation module identifies the negotiation solution as the option set of the maximum of the sum of weighted option preferences, the computation module further calculating the sum the maximum of the sum of weighted option preferences of the issue to form a maximum combined utility*". It is unclear what are "the sum the maximum" and "a maximum combined utility".

**Claim 4** recites the limitation "*the convexity of the negotiation*" in line 2. There is insufficient antecedent basis for this limitation in the claim.

**As for claim 14**, it is unclear about the term in step (e) "*....sum of the issue weight of each option for each party....*". Therefore, it is interpreted as "issue weights for each party" as recited in step (b).

#### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. **Claims 19-24** are rejected under 35 U.S.C. 102(e) as being anticipated by SRIVASTAVA ET AL.

Claim 19 calls for "*a computer readable storage medium comprising computer readable code configured to carry out a process for calculating a negotiation solution*", this is insufficient because it fails to include "for causing a computer system to perform" after "code" and therefore, it's merely a computer readable medium. The term "configured to" after code does not have much meaning because a code is a program. Therefore, the computer-readable medium of SRIVASTAVA ET AL, see claim 7, reads over the computer-readable medium of claim 19. Notice, claim 7 of SRIVASTAVA ET AL contains the limitation "therein for causing a computer system to perform" the steps in the preamble. Claims 20-24 are rejected for the same reason as shown in claim 19.

*Claim Rejections - 35 USC § 103*

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1-7, 8-13, 14, 19-24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over SRIVASTAVA ET AL (US 7,401,034) in view of HEFFNER ET AL ( US 2003/0018558).

As for claim 1, SRIVASTAVA ET AL disclose a data processing apparatus for calculating a bidding (negotiation) solution (best value) or optimal result for auction (col. 6, lines 26-27; figure 5, col. 8, lines 16-23 "...best value of a bid"), the apparatus comprising:

an input module configured to receive a plurality (4) of information/data about an issue (bidding/negotiation): (1) about an information item that functions as an issue, (2) attributes (weights) of the information item (issue), (3) option (solution) features of information item/issue, and (4) preferred option (solution) features of the

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item/issue [see figures 3-4; col. 2, lines 41-61; col. 6, lines 2-67; col. 7, lines 1-47

*"...receiving an item (issue) for auction comprising a plurality of attributes (weights); a value and a score or solution (option preference)].....;*

a storage module (database) configured to store the plurality (4) of information/data above [see col. 5, lines 30-37, col. 9, lines 41-43; and figures 1, 2, 8; *storage device 804*];

a computation module configured to calculate a plurality of weighted option (solution) preferences (WOP) of each option (solution) for each party, wherein each weighted option preference (WOP) is the issue weight (attribute) of the party multiplied by the option preference of the party (solution); {see figures 4-6; step (630); col. 3, lines 1-8; col. 8, lines 4-10 "*...weighted score (WOP) is calculated by multiplying the score (option preference) by relative weight....*"}

the computation module further configured to calculate a sum of weighted option preferences for the issue by summing the weighted option preferences for each option of the issue [see figures 5-6; col. 8, lines 10-39; "*....determining each weight score attribute, and is totaled, resulting in the composite score (sum of weighted option)....*"],

the computation module further configured to calculate a negotiation solution from the sum of weighted option preferences [see figures 5 and 7, col. 8, lines 31-66 *calculating (an auction solution) or (the best value auction) or (Rank #) is determined by dividing the price by the composite score (RANK #) ....*]; and

an output module configured to display the item (issue), the options (solution), a set of option (solution), and the item (issue) negotiation or auction solution {see figures 3-7; col. 8, lines 16-67;...*determine the ranking in the order of value provided by the bid or negotiation...*}.

SRIVASTAVA ET AL fairly discloses the claimed invention except for explicitly indicating that the term "negotiation" and "bidding" are equivalent or negotiation is a part of bidding.

In a similar bidding/negotiation process, HEFFNER ET AL discloses that the term "negotiation" and "bidding" are equivalent or negotiation is a part of bidding and they can be used interchangeably so that "negotiation solution" reads over "bidding for best value", see par. [0023]"negotiation (or bidding)]}. It would have been obvious to modify the teaching/terms of SRIVASTAVA ET AL by using the term "bidding" in place of negotiation and the product of the bidding process as the solution of the negotiation as taught by HEFFNER ET AL as mere using other similar terms for the same results.

**As for claim 2,** which deals with identifying a maximum value of the calculated values in a ranges of value from minimum to maximum, this is taught in SRIVASTAVA et al, see figure 5, right hand side, see "(RANK -3)", "(RANK-1)". Moreover, the identifying of any other maximum value for use in the selection of the solution would have been obvious as mere selection other similar "maximum" parameter or value.

As for claim 3, which basically contains a method step, "identifies", in an apparatus claim and this has no patentable weight. Furthermore, the step discloses wherein the computation module identifies the negotiation solution as the option set of the maximum of the sum of weighted option preferences, calculating the sum the maximum of the sum of weighted option preferences of the issue to form a maximum combined utility, this basically interprets as identifying the desired solution set as the maximum values set or selection of the maximum values set as the desired solution set, this concept is fairly taught in Fig. 5, right hand side, see "(RANK -3)", "(RANK-1)".

Note: In examination of the apparatus claim, the claims must be structurally distinguishable from the prior art. While features of an apparatus claim may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. vs. Bausch & Lomb Inc.* (Fed. Circ. 1990). Manner of operating the device or elements of the device, i.e. recitation with respect to the manner in which a claimed apparatus is intended to be employed/used, does not differentiate apparatus from the prior art apparatus. *Ex parte Masham*, 2 USPQ2d 1647 (BPAI, 1987).

Also, this is an apparatus claim and intended use limitation for the system/device or apparatus, i.e. "for managing plural approval services... service provider" carries no patentable weight.

**As for claim 4,** which deals with the feature of the convexity (distribution) of the negotiation (bidding) step, i.e. definition of the complexity which is calculated by the limitation as claimed, HEFFNER ET AL discloses the use of convexity features for calculating a final result, see Fig. 3, par. [0325], so it appears that the limitation of convexity in dep. claim is inherently included in the teaching of HEFFNER ET AL. Furthermore, it appears that the value or definition of convexity is well known in the art for calculating a result, and therefore, the use of any other definition or formula to determine the value/feature of the convexity, such as that in claim 4, would have been obvious as mere selection of other similar definition or formula to achieve similar results, absent evidence of unexpected results.

**As for claim 5,** SRIVASTAVA et al disclose at least one option set responsive to inputs of the negotiation issue, the issue weight (attribute), and the option (solution), the output module configured to communicate the at least one option set to each party, the input module receiving a utility definition from each party in response to the option set, the computation module configured to calculate the option preference of each party in response to the utility definition [see figures 3-7; col. 2, lines 51-67; col. 3, lines 1-9; col. 8, lines 40-67].

As for claims 6-7, which basically contain method steps, "identifies" and "is calculated" in an apparatus claim and these have no patentable weight for the same reason set forth in claim 3 above. Furthermore, these are taught in figure 5 of SRIVASTAVA ET AL.

As for claim 8, SRIVASTAVA et al disclose a system for calculating bidding (negotiation) solution (best value) (col. 6, lines 26-27; figure 5, col. 8, lines 16-23 "...best value of a bid"), the system comprising:

a data processing device [figure 8] configured to receive and display an issue or (item), a plurality of options (solution) for the issue, and a plurality of parties, the data processing device further configured to receive and display an issue weight (attribute) of each party for the issue, and an option preference (score solution) of each option for each party {see figures 3-5; figure 8; col. 2, lines 41-61; col. 6, lines 2-67; col. 7, lines 1-47 "*...receiving an item (issue) for auction comprising a plurality of attributes (weights); a value and a score or solution (option preference)}*"}

a server configured to receive the issue [see figure 1], the options(solution), the parties, the issue weights (attribute), and the option preferences (score solution) from the data processing device [see figures 3-and 8], the server further configured to calculate a plurality of sum of weighted option preferences as the sum of the products of the issue weight of each option for each party and the option preferences of each option for each party and to calculate a negotiation solution from the sum of weighted option preferences {see figures 5-6; col. 8, lines 10-23;

*“....determining each weight score attribute, and is totaled, resulting in the composite score (sum of weighted option)...”}; and*

a network configured to communicate between the data processing device and the server [figures 1, 2, 8].

SRIVASTAVA ET AL fairly discloses the claimed invention except for explicitly indicating that the term “negotiation” and “bidding” are equivalent or negotiation is a part of bidding.

In a similar bidding/negotiation process, HEFFNER ET AL discloses that the term “negotiation” and “bidding” are equivalent or negotiation is a part of bidding and they can be used interchangeably so that “negotiation solution” reads over “bidding for best value”, see par. [0023]“negotiation (or bidding)]}. It would have been obvious to modify the teaching/terms of SRIVASTAVA ET AL by using the term “bidding” in place of negotiation and the product of the bidding process as the solution of the negotiation as taught by HEFFNER ET AL as mere using other similar terms for the same results.

**As for claim 9,** SRIVASTAVA ET AL disclose wherein the server is further configured to calculate the maximum of the sum of weighted option preferences for the issue [figure 5].

**As for claim 10,** SRIVASTAVA ET AL disclose wherein the server is further configured to identify the negotiation solution as the option set of the maximum of the sum of weighted option preferences, the server further summing the maximum of

the sum of weighted option preferences for the issue to form a maximum combined utility [see figure 5].

**As for claim 11,** this limitation is the same as the dependent claim 4 above.

It is rejected for the same reason sets forth the dependent claim 4 above.

**As for claim 12,** SRIVASTAVA ET AL disclose wherein the server is further configured to calculate a combined utility for an option set [figure 5].

**As for claim 13,** this limitation is the same as the dependent claim 5 above.

It is rejected for the same reason sets forth the dependent claim 5 above.

**As for claim 14,** SRIVASTAVA ET AL disclose a process for calculating a bidding (negotiation) solution (best value) or optimal result for auction (col. 6, lines 26-27; figure 5, col. 8, lines 16-23 "...best value of a bid"), the apparatus comprising:

identifying an issue [figure 3, step 310]

determining a plurality of issue weights of the issue for a plurality of parties [figures 4-5];

recording a plurality of options for the issue [see col. 5, lines 30-37, col. 9, lines 41-43; and figures 1, 2, 8; storage device 804];

calculating a plurality of option preferences (score solution) of each option for each party [figures 5-6];

calculating a plurality of sum of weighted option preferences (total score solution) for the issue wherein the sum of weighted option preferences is the sum of the issue weight of each option for each party multiplied by the option preference of each option for each party {see figures 4-6; step (630); col. 3, lines 1-8; col. 8, lines 4-10 “...weighted score (WOP) is calculated by multiplying the score (option preference) by relative weight...”}; and

calculating a negotiation solution from the sum of weighted option preferences, the negotiation solution comprising an option set [figures 5, 6, 7 “total the weighted score (660) col. 8, lines 16-67;...determine the ranking in the order of value provided by the bid or negotiation...”].

SRIVASTAVA ET AL fairly discloses the claimed invention except for explicitly indicating that the term “negotiation” and “bidding” are equivalent or negotiation is a part of bidding.

In a similar bidding/negotiation process, HEFFNER ET AL discloses that the term “negotiation” and “bidding” are equivalent or negotiation is a part of bidding and they can be used interchangeably so that “negotiation solution” reads over “bidding for best value”, see par. [0023 negotiation (or bidding)]). It would have been obvious to modify the teaching/terms of SRIVASTAVA ET AL by using the term “bidding” in place of negotiation and the product of the bidding process as the solution of the negotiation as taught by HEFFNER ET AL as mere using other similar terms for the same results.

**As for independent claim 19,** which deal with a computer readable storage medium comprising computer readable code configured to carry out a process for calculating a negotiation solution [figures 1, 2 and 8]. Basically, this claim has the same limitation as the independent 14 above. It is rejected for the same reason set forth the independent claim 14 above.

**As for claim 20,** SRIVASTAVA ET AL disclose wherein the computation module identifies the negotiation solution as the option set of the maximum of the sum of weighted option preferences, calculating the sum the maximum of the sum of weighted option preferences of the issue to form a maximum combined utility, this basically interprets as identifying the desired solution set as the maximum values set or selection of the maximum values set as the desired solution set, this concept is fairly taught in Fig. 5, right hand side, see "(RANK -3)", "(RANK-1)".

**As for claim 21,** SRIVASTAVA ET AL disclose wherein the negotiation solution is the option set of the maximum of the sum of weighted option preferences for each issue [figure 5].

**As for claim 22,** SRIVASTAVA ET AL disclose wherein the sum of the issue weights for a party is equal to one {it is inherently discloses in figure 5}.

**As for dep. claims 23-24,** which deal with the feature of the option preference, "is calculated according...", this phrase is not a positive recited method step, and therefore, is interpreted as "being capable of" and the "option preference" of Srivastava is capable of having this limitation.

As for independent claim 30, which deals with an apparatus for calculating a negotiation solution. Basically this limitation is the same as the independent claim 14 above. It is rejected for the same reason set forth the independent 14 above.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
13. The US Patent to Hadingham et al. discloses a system for use on an electronic network for negotiating contracts between at least one buyer and at least one seller; And to Rickard et al. discloses a system for calculates the mutual satisfaction between negotiating parties and maximizes their mutual satisfaction over a range of decision variables.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy-Vi Nguyen whose telephone number is 571-270-1614. The examiner can normally be reached on Monday through Thursday from 8:30 A.M to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. N./

Examiner, Art Unit 3689

/Janice A. Mooneyham/

Supervisory Patent Examiner, Art Unit 3689